

## Supplementary Information

### **Phenotyping metastatic brain tumours applying spectrochemical analyses: segregation of different cancer types**

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**Table S1** Results of one-way Anova for both Raman and ATR-FTIR spectroscopy to determine statistical difference between all three groups. (KEY: CA – COLORECTAL ADENOCARCINOMA, LA – LUNG ADENOCARCINOMA, MM – MALIGNANT MELANOMA)

<b>Method</b>	<b>Group</b>	<b>Mean difference</b>	<b>95% CI</b>	<b>P-value</b>
Raman	CA vs. LA	0.03	-0.01 - 0.06	0.19
	CA vs. MM	-0.23	-0.26 - -0.20	<b>&lt;0.0001</b>
	LA vs. MM	-0.25	-0.29 - -0.22	<b>&lt;0.0001</b>
IR		-0.02	-0.03 - -0.00	0.01
	CA vs. MM	-0.10	-0.11 - -0.08	<b>&lt;0.0001</b>
	LA vs. MM	-0.08	-0.09 - -0.06	<b>&lt;0.0001</b>

**Table S2** Results of a student's *t*-test for Raman and ATR-FTIR spectroscopy to determine statistical difference between adenocarcinoma and MM. (Key: MM = metastatic melanoma, AD = adenocarcinoma)

<b>Method</b>	<b>Group</b>	<b>Difference between means</b>	<b>95% CI</b>	<b><i>P</i>-value</b>
Raman	MM	0.24+/-	0.22 –	<b>&lt;0.0001</b>
	vs. AD	0.01	0.27	
IR	MM	0.09 +/-	0.08 –	<b>&lt;0.0001</b>
	vs. AD	0.01	0.10	